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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,360	07/22/2003	David W. Manning		7676

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THOMTE, MAZOUR & NIEBERGALL, L.L.C.
2120 S. 72ND STREET, SUITE 1111
OMAHA, NE 68124

EXAMINER

CHIN, RANDALL E

ART UNIT PAPER NUMBER

1744

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,360

Applicant(s)

MANNING ET AL.

Examiner

Randall Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salecker 5,309,595 (hereinafter Salecker '595) in view of Block 6,448,732 (hereinafter Block '732)

With respect to claim 1, the patent to Salecker '595 teaches a sewer and drain cleaner 10 (Fig. 1) comprising, a frame 14, a rotatable drum 22 (col. 3, lines 35-38) mounted on said frame which has a flexible plumber's snake defined by coiled cable 16 associated therewith, a motor 18 (Figs. 1, 2 and 5) mounted on said frame, said motor having a driven shaft (not explicitly recited but still taught in order to drive a belt 20) operatively connected to said drum for rotating the same (col. 3, lines 34-36), and a control 24 connected to said motor for controlling the operation thereof.

The patent to Salecker '595 discloses all of the recited subject matter with the exception of a battery-powered cleaner device comprising a motor that is DC and a rechargeable battery mounted on said frame for powering the DC motor. The patent to Block '732 teaches a cleaner device which comprises a motor 40 (Figs. 1 and 4) which can operate in either of two modes, namely, via power supplied from an onboard (and

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thus on the cleaner itself) rechargeable battery 50 (i.e., from direct current provided by the battery and thus a DC motor) or from AC from a fixed AC power outlet (col. 1, lines 12-15, col. 3, lines 19-21, col. 5, lines 18-20 and 28-33).

It would have been obvious to one of ordinary skill in the art to have provided Salecker's cleaner with a motor that receives power from direct current (and thus a DC motor) provided by an onboard rechargeable battery as taught by Block '732 to aid in easing portability of the entire cleaner device by avoiding the need for long extension cords leading to electrical outlets and enabling the battery to be recharged for prolonged usage and extending it's useful life. The teaching of Block '732 clearly discloses that it is old and well known to operate a portable powered cleaner device motor by **either** power received from alternating current (AC) from a fixed power source (i.e., AC power outlet) or from direct current (DC) provided by an onboard rechargeable battery. Block's teaching simply gives users the choice of either power source mode.

As for claim 2, Salecker '595 teaches that the motor is operatively connected to the drum by a belt drive 20 (Figs. 1 and 2; col. 3, lines 34-36).

As for claim 3 reciting that the motor is operatively connected to the drum by a gear drive, one skilled in the art would find it obvious to use either a belt or gear arrangement between the motor and drum since they are practically functional equivalents of each other for driving the drum and each drive is old and well known. There is of course, no reason why a belt or gear drive could not be utilized, except for costs and manufacturing or design requirements.

As for claim 4, the battery 50 comprises a battery pack (col. 4, lines 15-17; Figs. 1 and 4).

As for claim 5, the recitation of a "high speed, high torque" motor is deemed merely a relative limitation absent any further specific speed or torque value claimed. In any case, values for motor speed and/or torque are deemed obvious since through an optimization process, one skilled in the art would find it obvious to select optimum values (i.e., high speed, high torque) for the particular task of cleaning drains and sewers which typically include large obstructions of tree branches, leaves and other debris. Such large obstructions would at least be suggestive of the need for higher speed and higher torque for completing the task.

As for claim 6, the modified Salecker cleaner is deemed include a "low" voltage DC motor, or at least suggestive thereof, depending on power requirements or choice of battery (see Block '732, col. 1, line 54 to col. 2, line 67 and col. 4, lines 63-67). Again, "low" voltage is merely a relative expression.

As for claim 7, the modified Salecker cleaner teaches a control device 61 (Fig. 4) which includes a motor (col. 5, lines 3-5) and "voltage" control (col. 1, lines 59-64 and col. 5, lines 7-17).

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salecker '595 in view of Block '732, as applied to claim 1 above, and further in view of Babb 4,218,802 (hereinafter Babb '802).

As for claim 8 reciting a **specific** range of torque and shaft speed for rotating the sewer and drain cleaner drum, Salecker's drum already rotates at a specific torque and shaft speed (col. 2, lines 46-52 and col. 3, lines 34-51) but is simply silent as to any specific torque and shaft speed value(s). In this case, such silence is not indicative of nonobviousness since the patent to Babb '802 also teaches a sewer and drain cleaner (Fig. 1; col. 1, lines 5-27) wherein a motor 3 has sufficient torque and shaft speed to rotate it's canister or drum 5 between 0 and 500 rpm (col. 3, lines 40-43) which meets the claimed range of "approximately 230-350 rpm". It would have been obvious to one of ordinary skill in the art to have provided the modified Salecker device with a motor that has sufficient torque and shaft speed to rotate the drum at approximately 230-350 rpm as taught by Babb '802 for ensuring a clearing out of drain or sewer obstructions. In any case, selection of an optimum or workable specific value or range of values for torque and shaft speed involves routine skill in the art to ensure clearing out of larger sewer or drain obstructions.

Conclusion

4. Applicant's arguments filed 13 October 2005 have been fully considered but they are not persuasive.

Applicant argues the combination of the primary reference to Salecker '595 and the secondary reference to Block '732. Applicant contends that Block '732 is non-analogous art since Salecker '595 is a sewer and drain cleaner and Block '732 teaches a suction cleaner of the vacuum cleaner type although still a cleaner device. Applicant

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argues that it is not believed that a person working in the sewer and drain cleaning art would look to the vacuum cleaner art. Applicant states that vacuum cleaners remove materials from rugs or the like by suction while sewer cleaners of the type herein loosen roots, obstructions, etc. Applicant further argues that Block '732 is non-analogous by the fact that the classifications of Block '732 and Salecker '595 are completely different as were the fields of search. Applicant goes on to state that the Examiner has failed to point out any suggestion or motivation to modify the Salecker '595 reference and that the Examiner has applied hindsight reasoning.

At the outset, whether AC or DC powered, **all** electrical devices are associated with an electrocution hazard and is widely recognized. One could still get electrocuted with Applicant's own invention.

Upon consideration of all of Applicant's arguments, it is the position of the Examiner that the rejection of claim 1 as being unpatentable over Salecker '595 in view of Block '732 has been properly applied and that both Salecker '595 and Block '732 are deemed analogous art. In response to Applicant's argument that Salecker '595 and Block '732 cannot be combined, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. **Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.** See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one

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skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). **However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art.** *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). **References are evaluated by what they suggest to one versed in the art**, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA) 1969.

In this case, the **combined teachings taken as a whole** would indeed suggest to one skilled in the art to have provided Salecker's cleaner with a motor that receives power from direct current (and thus a DC motor) provided by an onboard rechargeable battery as taught by Block '732 **to aid in easing portability of the entire cleaner device by avoiding the need for long extension cords leading to electrical outlets** and enabling the battery to be recharged for prolonged usage and extending it's useful life. The teaching of Block '732 clearly discloses that it is old and well known to operate a portable powered cleaner device motor by **either** power received from alternating current (AC) from a fixed power source (i.e., AC power outlet) or from direct current (DC) provided by an onboard rechargeable battery. Block's teaching simply gives users the choice of either power source mode. Applicant's argument that vacuum cleaners remove materials from rugs or the like by suction while sewer cleaners of the type herein loosen roots, obstructions, etc. and that Salecker '595 and Block '732 are non-analogous is unconvincing, particularly, in view of the fact that Salecker's and Block's

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devices are **both cleaning devices**. Each reference has a U.S. classification in class 15 and can be found therein. For example, Salecker '595 could be found in class 15, subclasses 104.33 and 257.01 and Block '732 can be found in class 15, subclasses 339 or DIG. 1. Therefore, Applicant's statement and argument that "the classifications of Block and Salecker are completely different as were the fields of search" is unpersuasive. There is no requirement that subclass classification and field of search must be the same for the art to be deemed analogous. One skilled in the **portable, wheeled** sewer and drain cleaning art would not narrow down his/her search to solely sewer and drain cleaning devices but should also be concerned and interested in searching other arts which **also include wheeled, portable cleaner devices**. Taking Salecker '595 and Block '732, as a whole, both could well be operated in similar environments, e.g., pool side areas, patio decks, etc. For this reason, Salecker '595 and Block '732 are deemed analogous.

Additionally, Salecker '595 teaches a wheeled, portable cleaner device that appears to operate in a single power mode, namely, by electric motor with cord. Salecker '595 is simply silent as to the **specific type** of power source. Block '732 also teaches a wheeled, portable cleaner device that can operate in a dual power mode, namely, via power supplied from an onboard (and thus on the cleaner itself) rechargeable battery 50 (i.e., from direct current provided by the battery and thus a DC motor) **or** from AC from a fixed AC power outlet (col. 1, lines 12-15, col. 3, lines 19-21, col. 5, lines 18-20 and 28-33. To say that Salecker '595 and Block '732 are non-analogous art would be similar to saying that an electric toothbrush device and electric

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shaver device are non-analogous when one skilled in either art would find it obvious to obtain some modification from the other art. For example, one versed in either art would find it obvious to modify the handle grip or simply to modify the power source arrangement, i.e., modifying the AC power source such that it can run on a DC power source with a DC motor and rechargeable battery in order to make the device portable and travel ready.). **In any case, both Salecker '595 and Block '732, as a whole, teach wheeled, portable cleaning machines and are thus deemed analogous.**

As for Applicant's argument that the Examiner has failed to point out any suggestion or motivation to modify the Salecker '595 reference, such basis is not understood. In the Office Action 15 August 2005, the Examiner explicitly stated the motivation to modify Salecker '595 by stating it would have been obvious to one of ordinary skill in the art to have provided Salecker's cleaner with a motor that receives power from direct current (and thus a DC motor) provided by an onboard rechargeable battery as taught by Block '732 to aid in easing portability of the entire cleaner device by avoiding the need for long extension cords leading to electrical outlets. In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, **it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning**. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicant asserts

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that they do believe that they are the “first persons to provide a battery-powered sewer and drain cleaner”, however, an onboard DC motor and rechargeable battery arrangement on portable, wheeled cleaner machines is such a widely known conventionality that any evidence of nonobviousness of Applicant’s invention cannot be found. Again, **there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA) 1969. In the instant case, the motivation need not come from the Salecker ‘595 reference **by itself** but only when there is some teaching, suggestion, or motivation to do so, found either explicitly or implicitly in the references themselves (i.e., both Salecker ‘595 and Block ‘732 and taken as a whole) or in the knowledge generally available to one of ordinary skill in the art.** To assert and argue that one skilled in the sewer and drain cleaner art would never consider modifying the machine such that it can run by DC motor with a rechargeable battery instead of by an electrical power cord is unpersuasive particularly in view of the fact that the DC motor with rechargeable battery arrangement is such an old and well known conventionality for rendering cleaning devices or machines **portable or travel/transport ready.**

Any arguments based on dependent claims 2-7 are deemed addressed by the above art rejections as well as the Examiner’s response to arguments herein since

these arguments are ultimately based upon the Applicant's invention running by DC motor and the motivation or suggestion to combine Salecker '595 with Block '732.

For all of the foregoing reasons, the rejections of claims 1-8 are deemed proper.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, John Kim, can be reached at (571) 272-1142. The number for Technology Center 1700 is (571) 272-1700.

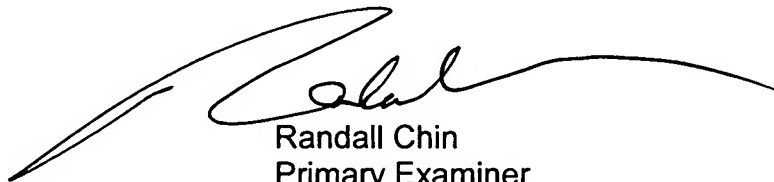
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The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



R. Chin



Randall Chin
Primary Examiner
Art Unit 1744